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ABSTRACT

An experiment demonstrating the effect of busyness of library staff on the frequency of approach by users is presented as an example of applying a scientific approach to the problems of the librarian-client interface using the methodology of the experimental psychologist. This methodology is explained and a review of the literature on librarianship and psychology, including three surveys indicating user reluctance to approach library staff, is provided. The experiment was conducted in Edinburgh University Library over a 2-week period in November 1978 at an information desk staffed by female assistants. The results indicate that a librarian who does not appear busy will be approached between 70 percent and 80 percent more frequently than a librarian who appears busy, even though the inquirer's perception of the librarian's approachability is comparatively neutral; however, the sex of the inquirer and the nature of inquiries, in terms of their relative complexity, are seen to be independent of the librarian's busyness. Recommendations are made concerning the further use of psychological research in the field of librarianship and information science, particularly as a means of establishing a scientifically valid literature of librarian-client behavior. Twelve tables, a 51-item bibliography, and an appendix listing inquiries recorded during the experimental period are provided. (Author/ESR)

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THE EFFECT OF BUSY LIBRARY STAFF ON RATE OF APPROACH
BY CLIENTS IN AN EXPERIMENTAL PSYCHOLOGICAL STUDY

by

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thesis submitted in candidacy
for the degree of
Master of Science

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1982

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ABSTRACT

The trend towards linking psychological research to problems of the librarian-client interface is discussed. A more rigorous, scientific approach to these problems is recommended, using the methodology of the experimental psychologist. This methodology is explained; an example experiment demonstrates the effect of 'busyness' of library staff on the frequency of approach by users. The results indicate that a librarian who does not appear busy will be approached between 70% and 80% more frequently than a librarian who appears busy. The nature of enquiries, in terms of their relative complexity, is independent of the librarian's busyness. Despite the inability of psychological research to produce simple and final answers to complex questions, the experimental approach demonstrated should be adopted as a means of establishing a scientifically valid literature of librarian-client behaviour.

ACKNOWLEDGEMENT

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1 INTRODUCTION

(a) LIBRARIANSHIP AND PSYCHOLOGY

The past decade has seen considerable growth in the interdisciplinary approach both to technological projects and to pure research. As a profession, librarians have not been slow to recognize the benefits of interdisciplinarity. Most notably perhaps, the methods of computer science have been employed to alleviate the librarian's increasing problem of manipulating large amounts of routine information. Nor have interdisciplinary benefits to the librarian been restricted to the utilization of new technology. At the present time only a cursory glance at the syllabus of any library school, or at the literature itself, is needed to see how extensively the methodology of management science is being applied in the library profession. Other disciplines which have been identified as being relevant to librarianship include, communication studies, linguistics, logic, mathematics, psychology, sociology, statistics, and systems design and management.¹

1. Whittaker, K. Towards a theory for reference and information service. *Journal of Librarianship*, 9 (1) January 1977, p. 49-63.

In recent years there has been a trend towards allying library and information work with psychology, and calls for interdisciplinary research in this area have come from established quarters of the profession.²⁻⁵

The literature of librarianship has witnessed a growing output of papers - particularly from the other side of the Atlantic - seeking to relate the findings of psychologists to the problems of librarians, notably the reference librarian.⁶⁻¹¹ These papers aim at

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2. Magson, M.S. Management. In Handbook of special librarianship and information work, 4th ed., edited by W.E. Batten, London, Aslib, 1975, p. 395-396.
 3. Foskett, D.J. User psychology. In International conference on training for information work, Rome, 1971 Proceedings. Rome, Italian National Information Institute; The Hague, International Federation for Documentation, 1972, p. 385-396.
 4. Brittain, J.M. Information and its users. New York, Wiley, 1970, p. 26-29.
 5. McGarry, K.J. Communication knowledge and the librarian. London, Bingley, 1975, p. 86-87.
 6. Budd, M. The readers' advisory situation in the public library: the significance of non-verbal communication. Journal of Librarianship, 9 (1) January 1977, p. 29-37.
 7. Sanders, P. Non-verbal communication in library question negotiation. In Knowledge and its organization, edited by D. Batty, University of Maryland, College of Library and Information Services, 1976, p. 130-138.
 8. Boucher, V. Nonverbal communication and the library reference interview. RQ 16 (1) Fall 1976, p. 27-32.

instilling in the professional readership an awareness of the interpersonal and communication difficulties which can arise during the interface between librarian and library-user. Yet there is a sense in which such papers lack true interdisciplinary cross-fertilization, for though drawing on accepted methodology of librarianship, they mainly draw on the literature of general, if not popularized, social psychology. Truly interdisciplinary studies between librarianship and psychology should draw rather on the methodology of the experimental psychologist. There are two reasons why existing interpersonal psychological treatments of librarianship are of questionable value and possibly even misleading.

(b) WEAKNESS OF EXISTING STUDIES

Firstly, we now accept that the reference interview is a most vital part of the reference librarian's function, and that library users do not always request the precise item of information they actually require. We

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9. Kazlauskas, E. An exploratory study: a kinesic analysis of academic library service points. *Journal of Academic Librarianship*, 2 (3) July 1976, p. 130-134
 10. McFadyen, D. The psychology of inquiry. *Journal of Librarianship*, 7 (1) January 1975, p. 2-11.
 11. Munoz, J.L. The significance of nonverbal communication in the reference interview. *RQ* 16 (3) Spring 1977, p. 220-224.

further accept that library users may indeed not even know what their information need is, and that the reference librarian may need to 'negotiate' the reference enquiry to a point at which he can reformulate the user's need in terms compatible with the retrieval system.¹² We accept that any process is only as reliable as its weakest link and that failure in the reference process is most likely to occur during the interview stage. Yet, accepting all these points and acknowledging how vital the reference interview is, the fact cannot be escaped that the reference interview is basically a fairly short, superficial, fairly ritualized affair. It has been described as a 'fleeting encounter'¹³, and as such does not really involve interpersonal relationships to any great depth. Certainly it does not bear the depth of psychological examination afforded to it by equating the role of the reference librarian with that of doctor, psychiatrist, or religious mentor.¹⁴⁻¹⁷

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12. Taylor, R.S. Question negotiation and information seeking in libraries. College and Research Libraries 29 (3) May 1968, p. 178-194
 13. Howell, B.J. Fleeting Encounters - a role analysis of reference librarian-patron interaction. RQ Winter 1976, p. 124-129.
 14. Peck, T.P. Counselling skills applied to reference services. RQ 14 (3) Spring 1975, p. 233-235.
 15. Calabrese, R. Interaction skills and the librarian. Illinois Libraries, 55 (1) January 1973, p. 8-11.

The second factor which constrains the relevance of general social psychology literature to the problems of librarianship concerns a number of more superficial interpersonal and non-verbal phenomena which are more plausibly applicable to the library situation. For example, Budd discusses reinforcement during interviewing, the role of eye-gaze in interaction, spatial behaviour, and the psychological significance of clothes.¹⁸ Munoz discusses physical distance, head nods, facial expression, orientation, looking, posture, etc.¹⁹ However, while it is encouraging that such papers have sought to stimulate the profession to an awareness of such phenomena there is a danger that these phenomena may be over-readily extrapolated to the library situation. For example, both Budd and Munoz mention the importance that the way people look at each other during conversation may hold for the librarian. This is a topic which has received

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16. Gothberg, H.M. Communication patterns in library reference and information service. RQ, 13 (1) Fall 1973, p. 7-14.
 17. Tibbets, P. Sensitivity training - a possible application for librarianship. Special Libraries, 65 (12) December 1974, p. 493-398.
 18. Budd, M. The readers' advisory situation in the public library: the significance of non-verbal communication. Journal of Librarianship, 9 (1) January 1977, p. 29-37.
 19. Munoz, J.L. The significance of nonverbal communication in the reference interview. RQ, 16 (3) Spring 1977, p. 220-224.

extensive coverage in experimental psychology and a variety of terms have been assigned to it, including, visual interaction,²⁰ eye-contact,²¹ and gaze-direction.²² These studies do indeed generally indicate that inappropriate visual interaction can have negative effects on the success of face-to-face interviews. However, to specifically predict a favourable gaze behaviour for librarians is fraught with hazards, for there are many more variables involved than might at first appear. For example, there are differences between the gaze behaviour of men and women. Women engage in more eye contact than men.²⁰ There are inter-racial differences in gaze behaviour. It appears that black listeners look less into the face of speakers than white listeners do.²³ It is probably also the case that excessive eye-contact will be perceived as threatening.²⁴

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20. Exline, R.V. Explorations in the process of person perception. *Journal of Personality*, 31 (1) 1963, p. 1-20.
21. Argyle, M. & Dean, J. Eye-contact, distance and affiliation. *Sociometry*, 28 1965, p. 289-304.
22. Kendon, A. Some functions of gaze-direction in social interaction. *Acta Psychologica*, 26 1967, p. 22-63.
23. Lafrance, M. & Mayo, C. Racial differences in gaze behaviour during conversations. *Journal of Personality and Social Psychology*, 33 (5) 1976, p. 547-552.

In this regard, a cartoon from a recent 'Library Association Record' gently but succinctly deflates the extreme viewpoint. Its caption reads: Yes, but how can you tell what the user really wants when they don't use body language?²⁵

(c) SCIENTIFIC METHOD OF PSYCHOLOGY

So what then, if anything, can the librarian expect to gain from collaboration with the psychologist? In order to answer this question it is necessary to understand the scientific methodology of the psychologist, a process the lay person frequently misconstrues.

Broadly speaking, psychology falls into two major divisions. Firstly, it is concerned with the discovery of information relating to human behaviour. This involves research and may be considered as the purely scientific side of psychology. The second division concerns itself with the application of this information relating to human behaviour to the various

24. Ellsworth, P.C. The stare as a stimulus to flight in human subjects. *Journal of Personality and Social Psychology*, 21 (3) 1972, p. 302-311.

25. Harley, A. 'Spook' cartoon. *Library Association Record*, 83 (11) November 1981, p. 517.



Figure 1: 'Spook' cartoon. Library Association Record

83 (11) November 1981, p. 517.

problems of human life, and would be considered as the professional aspect of psychology. It is perhaps to this second division of psychology that librarians should turn their attention, for in any psychological examination of a library situation we should have as our objective not only an understanding of the factors involved, but also the proposition of practical changes which might be put into effect to enhance the situation.

In attempting such an examination, or indeed any psychological investigation, the psychologist employs the tool of scientific methodology. Herein lies the lay person's misunderstanding of the function of the psychologist. As a science, psychology is probably still passing through an initial stage during which its findings are still fairly intelligible to the average person. As Miller²⁶ observes:

In order to stay alive among our fellow men, we must all be psychologists. Of course, survival requires us to be mathematicians, physicists, chemists and biologists, too, but there the distance has grown too great; no layman claims brotherhood without a prolonged initiation conducted at some accredited university. It was not always so. There was a time when Everyman was a physicist, when Shakespeare would interrupt a play to argue against the heliocentric theory of the universe, just as a modern playwright may digress to illustrate or oppose some new psychological theory to-day.

Because psychology is still accessible in this way to the man in the street, it is a common lay complaint 'that psychologists appear to say in ridiculously long words what most people already know to be a fact of life'.²⁷ But the educated guess or common-sense answer to a problem doesn't always correspond to the answer that is arrived at through scientific investigation of the problem. (See, for instance, Mackay's account concerning the visiting of children in hospital by their parents.²⁸) This is not to say, however, that anecdotal observation, common-sense, intuition and other subjective techniques are of no value to the scientific process, for they can often be a stimulus to research.²⁹

The exploration of a field of scientific knowledge by the anecdotal method is very generally a necessary preliminary to its conquest by adequate scientific methods of experiment and observation. Indeed its competent exploration in this way is an important step towards its final conquest, but this preliminary exploration must not be mistaken for completed work.

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26. Miller, G.A. Psychology: the science of mental life. London, Penguin, 1962, p. 17.
27. Legge, D. An introduction to psychological science. London, Methuen, 1975, p. 15.
28. Mackay, C.K. Introduction to psychology. London, Macmillan, 1973, p. 10-11.

Likewise, at the post-experimental stage, subjective techniques like interviewing and questionnaires may be of value in explaining behavioural observations.

However, the central and essential feature of true experimental psychological research is the control and manipulation of variables that are related to the experimental outcome. The experimenter (1) changes or varies something, (2) keeps other conditions constant, and (3) looks for an effect of the change or variation upon the system he has under observation. The factor being experimentally studied, which the experimenter manipulates, is called the Independent or Experimental Variable. The system under observation, in which the results of this manipulation appear and are measured, is called the Dependent Variable. The dilemma which now arises is, how is the psychologist to measure changes in the Dependent Variable. While researchers in the physical sciences can usually rely on standard units for the measurement of dimensions, weight, temperature, etc., the experimental psychologist frequently has to devise his own units of measurement. Human communication, for example, is an extremely complex process and, as yet, no adequate scale has been

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29. Thouless, R.H. General and social psychology. 5th ed., London, University Tutorial Press, 1967, p. 10.

devised against which to measure it. When faced with a very complex or delicate measurement like this, one option is to resort to the use of crude categories of division. For example, rather than attempting to plot small inter-related fluctuations in an observed behaviour, one might initially opt for a design whereby one simply recorded whether the behaviour being measured was present or absent. Thus one has a rather crude, but nevertheless quantifiable measure of the effect of the Independent Variable on the Dependent Variable. We have a two condition, or binary, scale on which the level of the measured behaviour will appear as either 'absent' or 'present'.

Transferring this to a library context, a crude measure of client-librarian communication might be taken to be whether or not a library user will approach the librarian to make an enquiry, viz. whether communication is 'absent' or 'present'. It is clear by inspection that under normal conditions a given number of users will approach librarians over any given period. As will shortly be discussed, it is also likely that a given number will not. Accordingly, all other variables remaining constant, any significant variation in the number of approaches made over a given period - the Dependent Variable - would be attributed to manipulations of the Experimental Variable.

2 EXPERIMENT

(a) INTRODUCTION

There are a variety of hypotheses which could be tested using the broad design outlined above. For example, it has been suggested that the dress of a librarian might affect his approachability.³⁰ It could be hypothesized that one form of dress - for example in a university a form of dress which approximated to the dress of student users - might tend to produce a higher level of approach than would the professional norm of suit, collar and tie. Alternatively, a number of writers have suggested staffing service points with non-professionals,³¹⁻³³ or even with student assistants.³⁴⁻³⁶ An observation arising from

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30. Budd, M. The readers' advisory situation in the public library: the significance of non-verbal communication. *Journal of Librarianship*, 9 (1) January 1977, p. 29-37.
 31. Halldorsson, E.A. & Murfin, M.E. The performance of professionals and nonprofessionals in the reference interview. *College and Research Libraries*, 38 (5) September 1977, p. 385-395.
 32. Boyer, L. & Theimer, W. The use and training of nonprofessional personnel at reference desks in selected college and university libraries. *College & Research Libraries*, 36 (3) May 1975, p. 193-200.
 33. St. Clair, J.W. & Aluri, R. Staffing the reference desk: professionals or nonprofessionals? *Journal of Academic Librarianship*, 3 (3) July 1977, p. 149-153.

such studies is that student library users relate more effectively to a peer than to a professional.³⁵ The hypothesis that a peer counter-staff would elicit a higher level of approach than a non-peer counter-staff could also be tested using this basic design framework.

The hypothesis which has, in fact, been selected for testing is that a "Busy" counter-staff will be approached less often than a "Not Busy" counter-staff. The Busy condition is taken to mean that the counter-staff are occupied between enquiries. For example, it is common practice to have staff manning service-points performing work amenable to a stop-start treatment so that they don't sit idly between enquiries. This work may involve writing overdue notices, checking catalogue cards, filing catalogue cards, reading reviews for book-selection purposes, etc. The Not Busy condition is taken to mean that the counter-staff have the sole function of answering enquiries, and will not become involved in other work between enquiries.

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34. Clark, A.S. & Pepple, H. The use of graduate assistants. RQ, 8 (4) Summer 1969, p. 240-241.
35. Young, A.P. Student assistants: a report and a challenge. RQ, 9 (4) Summer 1970, p. 295-297.
36. Heinlen, W.F. Using student assistants in academic reference. RQ, 15 (4) Summer 1976, p. 323-325.

This hypothesis is preferred for two reasons. Firstly, the problem it studies is a practical one of real relevance to library decision making. Applied psychology aims to provide solutions, or partial solutions, to practical problems. There are varying attitudes at present to the staffing of service-points, and while there is growing enlightenment to the idea that, as the 'sharp end' of the library service, a library may stand or fall by the quality of its counter-staff, it is still doubtful if a library authority or chief librarian would have no qualms about having members of staff sitting "idly" between enquiries. However, this uneasiness might be partially allayed if it could be shown that a librarian who was unoccupied between enquiries was approached a significantly higher number of times than a librarian who always appeared to be busy.

Secondly, this hypothesis deals with a problem which has been raised in several library surveys and in the general literature of librarianship. For example, a survey of undergraduates carried out at Southampton University Library in 1962 found substantial evidence of reluctance to put queries to library staff.³⁷ As shown in Table 1, reluctance varied depending on faculty and decreased with length of attendance at the

	Reluctant to put queries to library staff %
Arts	40
Economics	52
Law	30
Science	40
Engineering	33
1st year	44
2nd year	39
3rd year	33
All Students	39

Table 1: Extract from Southampton University survey showing percentages expressing reluctance to approach library staff.

university. Nonetheless, overall 39% expressed reluctance to put queries to members of the library staff. (As a footnote to this study, it was discovered that in all faculties except Law more men than women expressed reluctance to put queries to the staff. It was hypothesized that this might be because the counter-staff was predominantly female, but also counter-hypothesized that intuitively one might equally have expected this factor to have had an opposite effect on male students.)

A subsequent survey carried out in 1964 among the colleges which comprised the University's Institute of Education produced similar results indicating that 27% of the training college students felt reluctance in putting queries to library staff.³⁸ The 1964 survey went a step further than the 1962 survey and investigated the reasons for this reluctance. As Table 2 shows, averaged out over the five libraries involved in the survey, 51.2% of those expressing reluctance thought that the staff would be too busy to deal with their enquiry.

37. Line, M.B. Student attitudes to the university library: a survey at Southampton University. *Journal of Documentation*, 19 (3) September 1963, p. 100-117.

38. Line, M.B. The college student and the library. Southampton, University of Southampton Institute of Education, 1965, p. 26.

		Think query too elementary	Think staff too busy	Think staff unable to help
College	A (56)	33.3	33.3	33.3
	B (68)	78.9	36.9	15.8
	C (101)	72	56	20
	D (74)	63.6	55.6	18.2
	E (94)	50	58.4	29.2
	All students (393)	64.6	51.2	22.0

Table 2: Extract for Southampton University Institute
of Education survey showing reasons express-
ed for reluctance to approach library staff.
 (Figures are % of those responding; an ex-
 clusive choice of reason was not forced by
 the questionnaire.)

In 1967 the Parry Report on university libraries was published.³⁹ In the course of producing this report, the University Grants Committee commissioned a survey on undergraduate use of libraries. This survey contained a section 'How helpful the students found library staff to be'. It was reported that 21% of undergraduates said they were reluctant to put questions to members of the library staff. Again the reasons for reluctance were investigated. The main causes of reluctance volunteered by respondents are shown in Table 3, indicating that of those expressing reluctance 20% gave as the reason for their reluctance that the library staff were too busy.

These three surveys suggest that among university graduates reluctance to approach library staff exists as a significant problem, and that the perceived busyness of the library staff may be a causal factor in this problem.

The first suggestions that the solution to this problem may lie in a reappraisal of traditional roles have

39. University Grants Committee. Report of the committee on libraries. London, HMSO, 1967. Appendix 3, section 13.

	Percentage of those expressing reluctance
Don't like to bother them..	33
They are too busy.....	20
Prefer to find it myself...	17

Table 3: Extract from appendix to Parry
Report showing principle rea-
sons for reluctance expressed
by students surveyed.

come from the other side of the Atlantic. Swope⁴⁰ reports that:

.....a message has gotten through to a large group of potential users. It isn't the message that the librarian wants to communicate, but through words and actions librarians are reinforcing the user's feeling that he is a bother or stupid.

and concludes that:

if he (the librarian) is required to file a certain number of catalog cards, prepare book orders, or check invoices while manning the desk, he will never be able to change the image of the pre-occupied librarian.

More recently, Hernon⁴¹ reported that it was an often repeated comment that librarians seemed too busy and did not like to be bothered. This study further found that:

Statements pertaining to the unwillingness to disturb or bother a busy librarian were numerous. A common complaint was: "I hate to feel I'm putting someone out if that person is sitting behind a desk and is obviously busy".

40. Swope, M.J. & Katzer, J. The silent majority: Why don't they ask questions? RQ, 12 (2) Winter 1972, p. 161-166.

41. Hernon, P. & Pastine, M. Student perceptions of academic librarians. College & Research Libraries, 38 (2) March 1977, p. 129-139.

and concluded that:

all activities and work carried out at the reference desk that might distract the librarian from giving full attention to reference requests or keep the patron from requesting assistance need examination and modification.

It would appear then that there is good justification for experimentally testing the hypothesis that a Busy library staff will be approached less often than a library staff which is Not Busy.

(The results of the experiment which is described in the succeeding section have already been reported in a summarized form.⁴²⁾

(b) PROCEDURE

1 Environment

The experiment was conducted in Edinburgh University Library over a two week period from Monday 6 November

42. McMurdo, G. Psychology and librarianship - an appraisal of the potential of experimental psychology in the study of librarian-client behaviour. *Aslib Proceedings*, 32 (7/8) July/August 1980, p. 319-327.

to Friday 17 November 1978, excluding the intervening weekend.

The service-point selected for the experiment was the Information Desk located on the ground floor of the library. (See floor plan, figure 2.) This service-point's objectives are neatly defined by Harrelson.⁴³

Information Desk: a desk readily available to library patrons upon first entering the building. Traditional information desks have provided three basic types of service: (1) locational or directional information (where is...?), and (2) instruction in the use of the library and its materials, and (3) simple reference. Catalog assistance may also be a function of the information desk. The information desk may be distinguished from a reference desk in that the reference service provided by the information desk is limited to simple or "ready" reference; it does not offer extensive or specialized reference assistance.

It is the practice in Edinburgh University Library to maintain a record of enquiries made at the Information Desk. In the six month period preceding the experiment, the library was visited on several occasions to (a) outline the proposed study to the senior library staff, to (b) interview the assistants manning the Information Desk, and to (c) conduct pilot observational sessions.

43. Harrelson, L.E. Large libraries and information desks. *College and Research Libraries*, 35 (1) January 1974, p. 21-27.

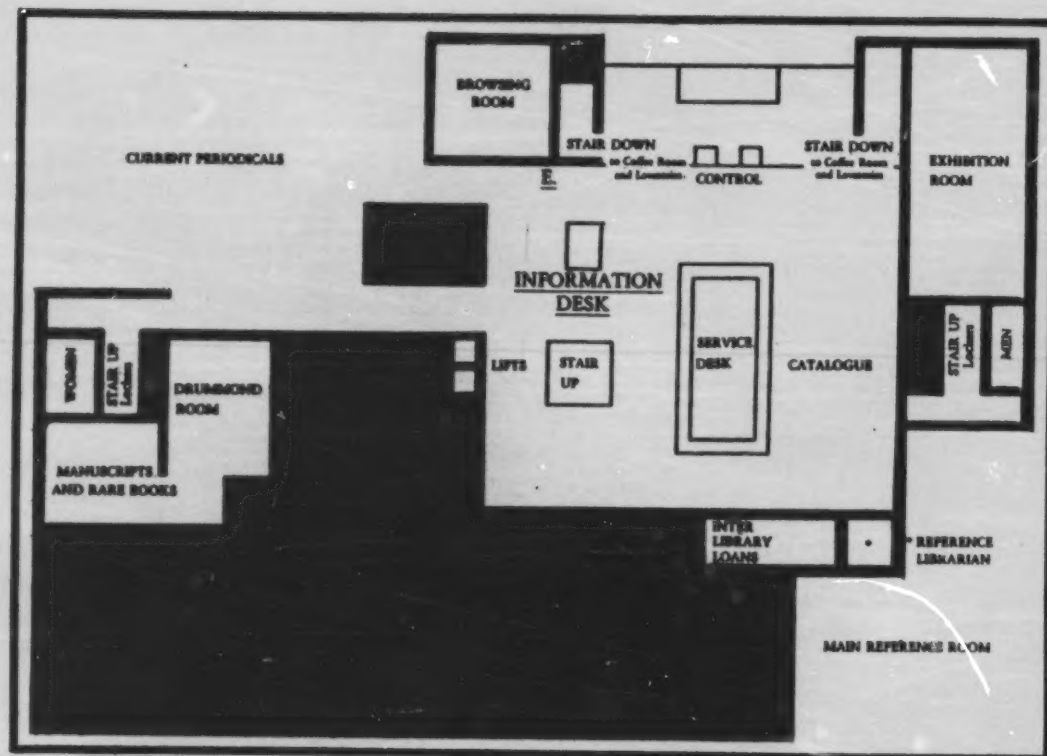


Figure 2: Ground Floor Plan - Edinburgh University Library
Main Library

During one of the earliest of these visits the data entered in the Information Desk record book over the preceding three years was analysed with a view to both assessing the nature of the enquiries received and also to determining the optimal time of year to conduct the study. Inspection of the distribution of enquiries over the academic year indicated the suitability of the first half of the month of November, a point at which the peaks corresponding to the commencement of the academic year in October are on the wane, but have not declined to the unpredictable levels experienced in the latter half of the academic year. The early part of November emerged as the period producing the most consistent levels of enquiries, in terms of low mean deviations from daily means.

During the period of the experiment the Information Desk was staffed by two female assistants, one of whom was present during the forenoon and one of whom was present during the afternoon. The experimental period was broken down into 20 three hour sessions, running from 0900 to 1200 hours and from 1400 to 1700 hours for each of the ten days of the study.

11 Experimental variable

The independent, or experimental, variable was the

Information Desk assistants' "busyness" or "not-busyness". It was arranged that for half the experimental sessions the assistants would appear Busy, while for the other half they would appear Not Busy. The matrices in figure 3 show the sequencing of the experimental sessions. There were thus 10 Busy trials and 10 Not Busy trials which, when treated as paired observations, were matched for differences between (a) assistants, (b) days of the week, and (c) mornings or afternoons.

The presentation of the experimental variable was given detailed attention.

Not Busy sessions were arranged so that, failing the ideal of having absolutely no work to do, the assistants had as little work to do as possible and, more importantly, produced the minimum visible evidence of work. The work-surface of the Information Desk was kept as clear as possible and the assistants responded immediately to any approach, dropping any task being performed. Furthermore, whenever the assistants were unable to avoid involvement in a task they endeavoured to look up and scan the library area about once per minute until the task was completed.

quarry

WEEK 1

	Mon	Tues	Wed	Thurs	Fri
AM	1B	1NB	1B	1NB	1B
PM	2NB	2B	2NB	2B	2NB

WEEK 2

	Mon	Tues	Wed	Thurs	Fri
AM	1NB	1B	1NB	1B	1NB
PM	2B	2NB	2B	2NB	2B

(1 = 1st Assistant

2 = 2nd Assistant

B = Busy

NB = Not Busy)

Figure 3: Sequencing of experimental sessions

For Busy sessions it was arranged that there would be ample work to do, and that this would be physically evident. Whereas for Not Busy sessions the work-surface of the Information Desk was kept as clear as possible, for Busy sessions the work-surface was actively employed to convey an impression of busyness. Some of this was genuine, for example, cataloguing slips, processing to be checked, Information Desk record book, etc., but two bulky volumes and two notebooks were also employed purely as 'props'. These were always placed on the Information Desk during Busy sessions and were always removed for Not Busy sessions.

To serve as a validation control on the presentation of the independent variable, a set of rating scales was devised, (See figure 4), rating along six parameters the impression the Information Desk assistants conveyed to library users. Interest was primarily in the Busy - - - Not Busy parameter, with the other five acting as blinds. (However, an Approachable - - - Unapproachable parameter was included as one of the five blinds to see if there would be a comparable subjective response to the effects being measured objectively in the study.) These rating scales were to be administered six times per experimental session on a 2 x 2 matrix so that it was responded to (a) three times by a male subject, (b) three times by a female

APPROACHABLE	— — — — —	UNAPPROACHABLE
CONFIDENT	— — — — —	LACKING CONFIDENCE
INTERESTED	— — — — —	BORED
BUSY	— — — — —	NOT BUSY
HAPPY	— — — — —	SAD
HELPFUL	— — — — —	UNHELPFUL

Figure 6: Validation rating scales

subject, (c) three times by a subject who had approached the Information Desk, and (d) three times by a subject who had not approached the Information Desk.

Respondents were not offered explicit information about the purpose of the scales, but rather were informed that it was part of a study into impressions of subjects engaged in various work activities.

iii Dependent variable

The dependent variable was the number of library users approaching the Information Desk to make enquiries. Variation in this dependent variable would - all other variables being constant or in balance - be attributable to the Busy or Not Busy behaviour of the Information Desk assistants. (Verbal exchange was the criterion for defining a valid approach. Instances where subjects were merely 'hovering' in the vicinity of the Information Desk were discounted.)

iv Uncontrolled variables

Firstly, during the pilot sessions preceding the main study it was observed that the Information Desk assistants tended to leave the Information Desk temporarily to instruct library users in catalogue use, locate

shelfmarks, etc. These absences were frequently of significant duration. Clearly, periods when the Information Desk was unmanned in this way would be invalid and would have to be discounted for the purposes of the study. Accordingly, a record was kept, to the nearest half-minute, of periods exceeding thirty seconds that the Information Desk was unmanned.

Secondly, it was clear that the number of subjects approaching the Information Desk would - above and beyond the experimental condition being presented - be a function of the number of persons in the library. For example, pilot observations had indicated that inclement weather could be expected to produce a marked reduction in the number of users entering the library and consequently in the number of users potentially able to approach the Information Desk. Accordingly, turnstile readings were taken at the control-point (See the floor plan, figure 2) at the beginning and end of each experimental session to provide a guide to variations in the numbers using the library during each session.

v Recording of data

A record of the number of times the Information Desk was approached was maintained by an experimenter

seated approximately three metres away at point 'E'. (See floor plan, figure 2.) The experimenter noted each consecutive approach, the time of the approach, the nature of the enquiry, and the sex of the enquirer.

The Information Desk assistants also recorded enquiries as a matter of normal library routine, writing down either the actual question asked, a semantic approximation to the actual question, or else the general nature of the enquiry. However, it had been determined during pilot sessions that certain categories of approach which would be regarded as valid from the point of view of the study failed to be recorded in the Information Desk record book. Basically this was either because through pressure of enquiries the assistants were unable to record fully, or else because certain enquiries were regarded as being below the level appropriate for inclusion in the Information Desk record book. For example, at the time of year the study was to take place the Information Desk acts as a point of sale for Edinburgh University Christmas cards. It is not, however, the policy to record such enquiries as card sales, nor certain others of a trivial directional nature. Nevertheless, such approaches would be included in the experimental study, and to facilitate collation, integration, and matching of enquiries as recorded by the assistants and experimenter

respectively, it was agreed that for the period of the study the Information Desk assistants would also note in the record book the time of each recorded enquiry.

The experimenter - utilizing a stopwatch - noted periods that the Information Desk was unmanned for any reason and recorded for each experimental session the total duration of any unmanned periods exceeding thirty seconds, rounded to the nearest half minute.

The turnstile counters at the entrance to the library were zeroed prior to opening each morning. The experimenter noted the turnstile readings at 1200 hours, 1400 hours and 1700 hours each day, thereby obtaining values for the beginning and end of each experimental session.

Finally, the experimenter administered the validation rating scales, generally handing respondents a clipboard with rating scales blank attached for completion, but on a minority of occasions completing rating scales under the direction of respondents who declined to do this themselves for various reasons.

vi Directions to participants

The Information Desk assistants participated in

discussions with the experimenter prior to the commencement of the study proper and contributed in identifying patterns of behaviour they could reasonably maintain for purposes of the study, while at the same time retaining consistency with their wider commitments to the library and its users. A fairly detailed set of instructions was worked out to regulate the Information Desk assistants' activities during the study.

For Not Busy trials the Information Desk was to be kept as clear as possible. Between enquiries the record book was to be kept closed and to one side. The assistant on duty was to remain alert for possible enquirers and ideally free from any non-vital work. Any approaches were to be responded to immediately, and any unavoidable task being performed (for example, writing up the previous enquiry) was to be dropped immediately. The assistant was to scan the library area from time to time, engaging rather than avoiding the gaze of any library users who were 'hovering' hesitantly. If the assistant was unable to avoid becoming involved in some task, then an attempt was to be made to look up and scan the library area at least once per minute until the task in hand was completed.

For Busy trials the Information Desk was to have various items on it to assist in conveying an

impression of work in progress. Some of this would be genuine, (viz. any work the assistants would routinely have performed, plus the permanently opened record book). Some would be 'props', to be placed on the desk for Busy trials and removed for Not Busy trials. The assistant was to be engaged in some form of work at the Information Desk and was not to attempt to initiate an enquiry interaction. (For example, by trying to catch a 'hovering' library user's eye.) The assistant was directed not to respond to a library user until he or she had stopped immediately in front of the Information Desk. If the work being performed by the assistant was of a conveniently unitary nature - for example, checking cataloguing, processing, etc - then the unit in hand was to be dealt with before responding, providing this didn't entail a delay of more than a few seconds.

For the special condition of being approached while still dealing with an earlier client, the assistant was directed to immediately tell any additional clients, "I'll be with you in a minute", for both Busy and Not Busy trials.

Finally, the assistants were to note the time of each enquiry in addition to its content, when writing up the record book.

(In addition to being verbally coached to comply with these instructions, both assistants were provided with a typed sheet detailing all of the foregoing.)

A standard dialogue was also devised for presentation by the experimenter to respondents to the validation questionnaire. This was as follows:

"We are carrying out some research into people's first impressions of other people engaged in various work activities, first impressions being very important in the way we evaluate people. In this particular instance I'd be grateful if you would give me your first impressions of the person now seated at the Information Desk over there, rated on these scales. (Presents clipboard & pen.) Don't give it too much thought. We are really just looking for a quick first impression."

(c) RESULTS

1 Central hypothesis

Over the two week period of the experiment, the Information Desk was approached 258 times during the recording periods of 0900 - 1200 hours and 1400 - 1700 hours. (The enquiries represented by these 258 approaches are listed in an appendix to this document.)

110 approaches were made during Busy sessions, while 148 approaches were made during Not Busy sessions.

The total time discounted during the study amounted to 21.094 hours - slightly more than one third of the total experimental period. The range of discounted time varied from a maximum of 1.650 hours to a minimum of 0.516 hours.

Table 4 shows the distribution of these 258 approaches over the experimental period. The first pair of columns in Table 4 indicate the sequencing of Busy and Not Busy sessions over the two week period. The second pair of columns give the number of approaches recorded during each of these sessions.

Table 5 shows the distribution of discounted time over the experimental period. The first pair of columns again serve to identify the experimental sessions. The second pair of columns give, in hours, the periods of time discounted during each of these sessions due to the Information Desk being Unmanned.

Table 6 shows the results from Table 4 reworked to give approach-per-hour scores, taking account of the times discounted as invalid as shown in table 5. By inspection it is clear that the level of approach is higher for Not Busy trials than for Busy trials. With the exception of Thursday AM, scores for Not Busy trials

	WEEK		NO. OF APPROACHES	
	BUSY CONDITION	NOT BUSY CONDITION	BUSY CONDITION	NOT BUSY CONDITION
M (AM)	1	2	10	14
M (PM)	2	1	18	18
TU (AM)	2	1	11	12
TU (PM)	1	2	14	12
W (AM)	1	2	4	13
W (PM)	2	1	11	20
TH (AM)	2	1	13	11
TH (PM)	1	2	12	17
F (AM)	1	2	10	12
F (PM)	2	1	7	19
TOTAL			110	148

Table 4: Distribution of approaches
over experimental period

	WEEK		TIME DISCOUNTED	
	BUSY CONDITION	NOT BUSY CONDITION	BUSY CONDITION	NOT BUSY CONDITION
M (AM)	1	2	1.050	0.950
M (PM)	2	1	0.633	1.550
TU (AM)	2	1	0.516	0.733
TU (PM)	1	2	0.783	1.650
W (AM)	1	2	1.383	1.116
W (PM)	2	1	1.083	1.600
TH (AM)	2	1	0.866	0.866
TH (PM)	1	2	1.200	1.300
F (AM)	1	2	0.516	1.150
F (PM)	2	1	0.733	1.416
TOTAL			8.763	12.331

Table 5: Distribution of discounted time over
the experimental period (in hours)

	BUSY CONDITION	NOT BUSY CONDITION
M (AM)	5.128	6.829
M (PM)	7.605	12.414
TU (AM)	4.428	5.293
TU (PM)	6.811	8.889
W (AM)	2.474	6.900
W (PM)	5.738	14.286
TH (AM)	6.092	5.155
TH (PM)	6.667	10.000
F (AM)	4.026	6.486
F (PM)	3.088	11.995
AVERAGE	5.156	8.825

Table 6: Number of approaches reworked to
give approach-per-hour scores,
taking account of discounted time

always exceed the scores for the corresponding Busy trials. Since the day and time of the week of each session is held to be a variable, this data is treated as a series of ten paired observations, rather than as two homogeneous populations.

The Standard Deviation of the signed differences between the columns in table 6 is 3.142, with a Student's *t* value of 3.693. For a two-tailed test with nine degrees of freedom the critical values of *t* at the 0.05 and 0.01 levels of confidence are 2.26 and 3.25 respectively, so the null hypothesis can be rejected at both these levels.

As described previously, turnstile readings were recorded during the period of the study to provide some indication of the overall numbers using the library. Table 7 shows the turnstile readings at 1200, 1400 and 1700 hours from 6 November to 17 November.

Table 8 shows the approach-per-hour scores from table 6 after further reworking to take account of variations in turnstile readings between corresponding experimental sessions.

(The method for this reworking was as follows: The turnstile meters were zeroed at 0900 hours each day,

	1200 hrs	1400 hrs	1700 hrs
M 6	1501	2723	5168
TU 7	1267	2586	4861
W 8	1318	2325	4072
TH 9	1295	2622	4930
F 10	1229	2247	3891
M 13	1490	2790	5163
TU 14	1205	2489	4751
W 15	1083	2088	3826
TH 16	1210	2605	4156
F 17	1178	2249	3909

Table 7: Turnstile readings recorded
during the experimental period

	BUSY CONDITION	NOT BUSY CONDITION
M (AM)	5.107	6.849
M (PM)	7.753	12.179
T (AM)	4.542	5.163
T (PM)	6.297	8.916
W (AM)	2.253	7.648
W (PM)	5.752	14.249
TH (AM)	6.306	4.985
TH (PM)	5.574	12.440
F (AM)	3.942	6.626
F (PM)	3.073	12.052
AVERAGE	5.060	9.111

Table 8: Approach-per-hour scores from
table 6 after reworking to
take account of turnstile
variations between session pairs

therefore the 1200 hour reading is taken as the result for each morning session. The corresponding result for an afternoon session is derived by subtracting the 1400 hour reading from the 1700 hour reading. Thus for each of the ten pairs of sessions a turnstile value is known for both the Busy session and the Not Busy session. The approach-per-hour scores for these sessions - as presented in table 6 - were adjusted on a pair-by-pair basis as a function of deviation from the pair's mean turnstile value. For example, the turnstile values for the Monday AM pair were 1,501 for the Busy condition and 1,490 for the Not Busy condition. The mean of these two values is 1,495.5. Taking this mean as a common numerator and the turnstile values as denominators, the resulting products reduce the Busy approach-per-hour score from 5.128 to 5.107 and correspondingly increase the Not Busy score from 6.829 to 6.849.)

The Standard Deviation of the signed differences between columns in table 8 is 3.405, with a Student's t value of 3.762. For a two-tailed test with nine degrees of freedom the critical values of t at the 0.05 and 0.01 levels of confidence are 2.26 and 3.25 respectively, so the null hypothesis can again be rejected at both these levels, but not at the 0.002 level. More than 60% of the variability between

sessions is attributable to the magnitude of the experimental effect.⁴⁴

ii Validation rating scales

Due to problems in administering the rating scales, particularly in the case of subjects who approached during Busy sessions, returns of 50 sets of scales for Not Busy sessions and 46 for Busy sessions were obtained, out of a possible 60 in each case.

The method of scoring the rating scale results was to assign each of the six points along a parameter value of 2.5, 1.5, 0.5, -0.5, -1.5, and -2.5 respectively. A mean was then calculated for the rating scales returned during each session.

Table 9 shows the results obtained from the validation rating scales along the Busy - - - Not Busy parameter. Date and time was not held to be a variable in subjects' responses to the rating scales and so each of the two columns in table 9 is treated as a homogeneous population. The mean for all Busy sessions was 1.422

44. Friedman, H. Magnitude of experimental effect and a table for its rapid estimation. Psychological Bulletin, 70 (4) 1968, p. 245-251.

BUSY - NOT BUSY PARAMETER	
CONDITION (B)	CONDITION (NB)
0.667	-0.500
1.700	1.167
0.700	0.333
1.500	1.500
1.250	0.100
1.500	1.167
1.500	2.000
1.833	0.500
1.667	1.500
1.900	1.100

Table 9: Results from rating scales
along Busy - Not Busy parameter

with a Standard Deviation of 0.431. The mean for all Not Busy sessions was 0.887 with a Standard Deviation of 0.759. A Student's t test on these two populations produced a value of $t = 1.906$. For a one-tailed test with eighteen degrees of freedom the critical value of t at the 0.05 level is 1.734 so H_0 - that there is no difference between the two populations - can be rejected at this level. The critical value at the 0.025 level is 2.101, so H_0 cannot be rejected at this level of confidence. Less than 20% of the variability between Busy and Not Busy sessions can be attributed to experimental effect.⁴⁵

Table 10 shows the results obtained from the rating scales along the Approachable - - - Unapproachable parameter. Again the two columns are treated as homogeneous populations. The mean for all Busy sessions was 1.017 with a Standard Deviation of 0.334. The mean for all Not Busy sessions was 1.153 with a Standard Deviation of 0.472. A Student's t test gave a value of $t = 0.711$. For a one-tailed test with eighteen degrees of freedom the critical value of t at the 0.25 level is 0.688. so H_0 can be rejected at this

45. Friedman, H. Magnitude of experimental effect and a table for its rapid estimation. Psychological Bulletin, 70 (4) 1968, p. 245-251.

APPROACHABLE - UNAPPROACHABLE PARAMETER	
CONDITION (B)	CONDITION (NB)
0.833	0.300
0.500	1.167
1.300	1.250
1.500	2.167
0.500	1.100
1.100	1.000
1.000	1.500
1.000	0.250
1.333	1.100
1.100	1.700

Table 10: Results from validation rating scales along
Approachable - Unapproachable parameter

level. The critical value at the 0.1 level is 1.330, so H_0 cannot be rejected at this level of confidence.

iii Sex differences

Table 11 shows the results for the number of raw approaches originally presented in ~~table~~ 4, but now broken down to show the number of approaches made by males and females respectively during Busy and Not Busy sessions. Although overall males approached more often than females at a ratio of about 54% to 46%, there is no significant difference between the ratios of males and females approaching during Busy sessions and the ratios of males and females approaching during Not Busy sessions.

iv Analysis of enquiries

Examination of the literature indicates two basic approaches to the categorization of enquiries. The first approach might be described as particular and enumerative. For example Shores' table of "Inquiry and Reference Form",⁴⁶ shown in figure 5, attempts to classify enquiry types according to the form of

46. Shores, L. Basic reference sources. Chicago, American Library Association, 1952.

	APPROACHES			
	BUSY CONDITION		NOT BUSY CONDITION	
	M	F	M	F
	2	8	9	5
	10	8	10	8
	4	7	6	6
	8	6	7	5
	1	3	3	10
	8	3	10	10
	9	4	6	5
	7	5	10	7
	7	3	9	3
	4	3	9	10
TOTAL	60	50	79	69
%	54.55	45.45	53.38	46.62

Table 11: Approaches during experimental sessions
broken down to show male - female ratio

INQUIRY TYPES	FORM MATERIALS
Definition, spelling, abbreviation, symbols, foreign terms usage.	Dictionary
"Something about", general information, self-education.	Encyclopedia
Notables, specialists, socialites, others.	Biographical dictionary
Current events, past year's developments, recent happenings.	Yearbook, serial.
Locations, descriptions, distances.	Gazetteer, atlas.
Addresses, purposes.	Directory
Curiosities, statistics, events, formulas, allusions.	Handbook
"How to do", "How to make".	Manual
Reviews, best books, subject literature.	National, trade, subject bibliography.
Pictures, cartoons, slides, films, recordings.	Audio-visual materials.

Figure 5: Shores' table of reference and inquiry form

reference material used to answer them.

The second method could, by contrast, be described as general and analytical. For example, Foskett⁴⁷ identifies 'three main lines of approach in reference service:

- (1) the author title approach, in which the reader names a document or group of documents: "Do you have the Journal of Experimental Psychology?"
- (2) the factual approach, in which the reader names a specific fact: "What is the specific heat of mercury?"
- (3) the subject or problem approach, in which the reader names, as nearly as he can, the subject of his interest: "Have you anything on the teaching of number in primary schools?"

Another proponent of the analytical approach is Hanson who takes as the first of his three categories:⁴⁸

47. Foskett, D.J. Information service in libraries. London, Crosby Lockwood, 1967, p. 83.

48. Hanson, C.W. Subject inquiries and literature searching. In Handbook of special librarianship and information work, 3rd edition, edited by W. Ashworth, London, Aslib, 1967, p. 415-452.

'(a) inquiries for simple facts or figures'

(Equivalent to Foskett's second category.) Hanson's own second category is:

'(b) some information about

while his third category goes one logical step beyond Foskett's final category:

'(c) all the information about

Whereas Hanson has shunted his three categories one place 'up market' of Foskett's, the comparatively simple nature of the enquiries received at the Edinburgh University Library Information Desk clearly requires a system of categorization somewhat 'down-market' of Foskett's. Ironically the system identified as most appropriate was suggested by Harrelson⁴⁹ in his previously cited definition of the function of an Information Desk. Harrelson identifies three categories of Information Desk enquiries, as follows:

49. Harrelson, L.E. Large libraries and information desks. College and Research Libraries, 35 (1) January 1974, p. 21-27.

- (1) Locational or directional information (where is?)
- (2) instruction in the use of the library and its materials
- (3) simple reference

The task of assigning the 258 enquiries to Harrelson's categories was performed by a panel of three librarians experienced in readers' service work and familiar with the practices and geography of Edinburgh University Library. (Certain guidelines which were developed in the process of assigning the enquiries will be explained in the discussion section.) The three librarians had no explicit information about the overall objectives of the study and worked from a continuous list, rather than a list batched by sessions as it appears in the appendix to this document. Table 12 shows the results of their efforts, giving the volume of each category received during the study for each of the two experimental conditions.

Although the final percentage distribution line in Table 12 indicates a slight overall shift towards the higher categories during the Not Busy sessions, there is in fact no statistically significant difference

		BUSY			NOT BUSY		
		Categories			Categories		
		(1)	(2)	(3)	(1)	(2)	(3)
M	6	7	2	1	3	13	2
TU	7	4	5	5	3	7	2
W	8	1	3	0	12	6	2
TH	9	6	5	1	8	2	1
F	10	4	6	0	11	5	3
M	13	8	9	1	7	6	1
TU	14	6	5	0	6	6	0
W	15	6	4	1	9	2	2
TH	16	12	1	0	6	10	1
F	17	4	3	0	6	5	1
TOTAL		58	43	9	71	62	15
%		52.73	39.09	8.18	47.97	41.89	10.14

Table 12: Distribution of categories of enquiries

between the categories of enquiry received during Busy sessions and the categories of enquiry received during Not Busy sessions. (A chi-square test on this data gave a value of $\chi^2 = 0.668$. With two degrees of freedom, the 0.75 confidence value is 0.575 and the 0.5 value is 1.386.)

(d) DISCUSSION

1 Central hypothesis

The data derived from the experiment encourage confident rejection of the null hypothesis that there is no difference between the number of times a Busy Information Desk assistant will be approached, and the number of times a Not Busy assistant will be approached. Furthermore it is evident by inspection that the rate of approach was between 70% and 80% higher during Not Busy sessions.

The 0.01 level of confidence at which the null hypothesis is rejected is applicable both to the test on the basic approaches-per-hour scores from table 6, and also to the test on the approaches-per-hour scores reworked in relation to the turnstile data from table 8. This is a bonus from the point of view of the

experiment since the relationship between the turnstile readings taken at the end of each session and the number of library users potentially able to approach the Information Desk with enquiries is clearly not absolutely direct. The directness of the relationship would be frustrated both by users who entered during a morning session and remained in the library long enough to be present for a significant part of the afternoon session, and at the other end of the scale, by users who made only very brief stays in the library and perhaps even entered on more than one occasion during a single session. (There is no 'out' turnstile meter.) However, it transpired that the turnstile readings remained fairly consistent from the first week to the second week, to the extent that they ultimately did not exert a significant effect on the basic approaches-per-hour scores.

11 Validation rating scales

The differences in ratings of perceived busyness between the two experimental conditions are small and only marginally significant, which warrants some discussion. Firstly, there may have been a response bias against rating the Information Desk assistants as being Not Busy (ie 'idle'). Several respondents were solicitous

that they might be "getting somebody into bother" if they rated negatively and thereby implied some criticism of the assistant. The possibility of a response bias is supported by the scores from tables 9 and 10. Although experimentally one is looking only for a relative difference between responses during sessions with different experimental conditions, the way the rating scale results were scored makes it apparent that in absolute, rather than relative, terms there was only one single session in which the mean rating of the assistants' busyness or approachability was actually negative, (i.e. less than zero).

Secondly, the validation rating scale was a subjective measure of respondents' conscious perceptions of the Information Desk assistants. This type of discrepancy between, on the one hand, subjects' reporting of their own attitudes or predicted behaviour, and on the other hand, subjects' observable behaviour in the real life situation, is a common occurrence in the literature of psychology. This phenomenon is, in fact, one of the strongest arguments against subjective research techniques such as interviewing and questionnaires, for it appears that one of the less reliable ways of determining how a person will behave in a given situation is to actually come right out and ask that person directly. This is an important point for librarians

and information scientists in whose literature questionnaire-based user surveys proliferate. Psychologists themselves do, of course, make extensive use of rating scales, questionnaires, and interviews, but their technique is generally less concerned with face-value answers to discrete questions than with observation of patterns in the way subjects respond to types of questions which empirical study has indicated will tend to be answered in one particular way by one category of respondent and in other ways by other categories.

However, these two points notwithstanding there still remains an interesting inconsistency in the present results which suggests that "busyness" may be a more complex phenomenon than it first appeared. Consider that:

- Rating scales for the Busy - Not Busy parameter confirmed at a 95% level of confidence that subjects perceived the desired difference between the experimental conditions.
- The main set of results confirmed at a 99% level of confidence that there was a significant difference in the rate of approach and that Not

Busy sessions produced upwards of a 70% increase in frequency of approach.

- Rating scales for the Approachable - Unapproachable parameter, however, indicated that the perceived difference in approachability during these sessions could only be held to exist at a 75% level of confidence.

Summarizing these three findings, it seems that while subjects perceived the assistants as busy and actually approached less often, their subjective perception of the assistants' approachability was comparatively neutral. Perhaps then busyness is an even greater deterrent to approach than library users themselves are aware.

iii Sex differences

There was remarkably little overall variation in the relative numbers of males and females approaching the Information Desk during Busy and Not Busy sessions. Although individual sessions produced substantial variations in male-female ratios, over the whole period of the study the mean ratio of about 54% males to 46% females showed no significant sensitivity to the

experimental variable.

iv Analysis of enquiries

Although the system of categorization adopted appears reasonably straightforward, the actual process of applying these categories threw up several points requiring resolution.

There were a number of instances where a single enquiry really comprised two questions. In such cases categorization was based on the first question.

It was decided that questions of a procedural nature, for example, "How do I get books from the sixth floor?" etc., would be assigned to the first category.

Two common methods of enquiring about periodicals are exemplified by the enquiries, "Where is the 'English History Review'?" and "Do you have 'Akros'?". Superficially the former would appear to be directional and therefore falling into the first category. The latter tends more towards the second category, the rationale for this being that the response it elicits is for the assistant to draw the enquirer's attention to the existence and method of use of the library's

periodicals holdings list. In reality it was quickly realised that both questions belonged to the second category since, regardless of whether the question is phrased in the "Where is?" format or the "Do you have?", the effect on the Information Desk assistant was identical.

On the other hand, a distinction was drawn between questions exemplified by firstly, "Where is .1?", and secondly, "Where is Accounting?". Questions of the first type were assigned to the first category as being purely directional in nature. Questions of the second type were assigned to the second category. The rationale for this differentiation is that the need to draw the enquirer's attention to the existence and method of use of the library's subject index precedes the reduction of such questions to a directional level.

(It should also be noted that whilst many of the enquiries appear in the appendix as statements in the first person, they are generally only semantic approximations to the actual enquiry, since a syntactically precise transcription was not a primary concern in the experimental design. Indeed, many enquiries are rendered only descriptively. For example, 'Help in using catalogues'.)

Table 12 shows the distribution of enquiries received at the Information Desk over the two week period of the study and reveals no significant differences in the categories of questions received under the two experimental conditions.

It is important that this finding be viewed in its proper context. The primary concern of the study being reported here was the testing of the hypothesis that a Busy assistant would be approached less frequently than an assistant who did not appear to be busy. Having now accepted experimentally the validity of this hypothesis then clearly one area for further examination - as will be expanded upon shortly - is the consideration of how this phenomenon might affect the kinds of questions library users ask, or don't ask as the case may be. Since a reasonably accurate record of enquiries was to hand, it was subjected to the analysis described above, with the results reported above, namely that there was no significant difference between the categories of enquiry received during Busy sessions and those received during Not Busy sessions, so far as the present basis of categorization is concerned. This is a surprising finding since intuitively one might have expected that the deterrent to making enquiries would not apply equally 'across the board';

that certain categories of enquiry would be less susceptible than others under differing experimental conditions.

For example, one polarization which intuitively suggests itself is that users may be deterred to a relatively greater extent from asking more complex reference questions; that they may conversely feel less inhibited about approaching busy library staff with a simpler type of enquiry. This seems an entirely plausible hypothesis, yet on the other hand it will be recalled that one of the surveys cited as reporting busyness of library staff as a deterrent to approach also reported as a major cause of non-approach the feeling that a query was "too elementary" (refer back to table 2) so there we have a competing intuitive hypothesis. Empirical evidence, however, enables us to reject both. Note, however, that the conclusion drawn here is that the distribution of complex and elementary enquiries is independent of the librarian's busyness. Note also that the system of categorization utilized was one designed by librarians for librarians, as indeed all such systems are. Yet there is really no ground for assuming a close correlation between what in the mind of the professional librarian is a complex enquiry, and what in the mind of the layman

is a complex enquiry. Indeed, it would be easy to produce anecdotal evidence to the contrary. Consequently, while it may be concluded that - from the librarian's viewpoint - there is no qualitative variation in the complexity of enquiries asked, that is not to say that subjectively library users may not experience a reluctance to make enquiries which they personally construe as either complex or elementary.

v Areas for further study

Two main areas of research recommend themselves in view of the finding that the busyness of a library staff can act as a deterrent to approach by library users.

Firstly, as discussed briefly above, it could be investigated if this deterrent applies 'across the board' regardless of the type of enquiry being made, or if certain categories of enquiry are more susceptible than others. In designing an experiment to properly test such a hypothesis one would of course have to take account of the fact that in this context 'complexity'

is purely subjective on the part of the library user, probably also with considerable individual differences from user to user. In the same way that it is realised that individuals form personal constructs of events, they may just as well form equally personal constructs of the complexity of identical enquiries.

Secondly, it would be of practical value to subject the fairly broad concept of 'busyness' to detailed examination. It is, regretfully, difficult to imagine an economic climate in which even the most enlightened administration could tolerate staff being ostensibly idle between enquiries, particularly in the public sector. However, the determinants of perceived busyness could be investigated and broken down with a view to identifying which types of tasks produce the greatest deterrence to approach, and which types produce least. It might even transpire that the design of library service point furniture is itself significant. There is a wide range of options in the specification of such furniture, and present selection practices may reflect little more than personal whims.⁵⁰ Library desks can commonly be anything from 70 cms to 140 cms high. Their work surfaces can be

50. Pierson, R. On reference desks. RQ, 17 (2) Winter 1977, p. 137-138.

flat, or angled away from the library user, or flat but with a raised front section shielding the librarian's work from the customer, etc. Library desks with high raised front sections are often criticised as creating not only a physical but also an interpersonal barrier against the intending enquirer. It might, however, transpire that such an arrangement produces a net benefit if it serves to conceal more powerful factors contributing to the perception that the librarian is busy. Likewise, the location and orientation of service-points may affect the way the librarian on duty is perceived.

3 CONCLUSION

It is possible that the approach which has been set out in this paper, and the direction it proposes for future psychological research in librarianship, may not be welcomed enthusiastically by librarians who may have been expecting more immediate benefits from collaboration with the psychologist. The news that busy library staff are approached less often than staff who don't appear to be busy is unlikely to shake the library world to its foundations. Nevertheless, this is typical of the way the psychologist works. He doesn't 'know' what people are thinking, nor is he gifted with any mystical insight into the human condition. In reality, the psychologist approaches problems by building up a framework of partial answers, often by seemingly disproportionately strenuous application of scientific methodology, uncovering small, specific, undramatic details which he hopes will eventually enable him to perceive the overall picture more clearly. As Wright⁵¹ has observed:

It is characteristic of the scientific approach that it is piecemeal; one limited and localized problem is taken at a time. There is a preference for investigating aspects of behaviour in their simplest form first and thereby accumulating a body of knowledge from the standpoint of which more complex aspects can be tackled.

Yet even accepting Wright's counsel, it would only be natural for the experienced librarian to question the value of experimentally proving an effect such as that busy librarians are approached less often, when that librarian may already have intuitively grasped and even applied this knowledge.

Such a question would be answered in two, inter-related ways. Firstly, there is Legge's contention that:⁵²

...the bulk of psychological research should indeed be aimed at demonstration of 'what we already know' - but that it should be attempting to go one step further. It should be formalizing a picture of the underlying mechanisms so that we could train a Martian to be as skilful in interpreting human behaviour as ourselves. It is important to discover how we do the things that we know we can do.

It used to be a commonly ventured view that librarianship was an art, that good librarians were born, not made, and so on. This view represented a failure to formalize library processes sufficiently well that the

51. Wright, D.S. Introducing psychology. Harmondsworth, Penguin, 1970, p. 20.

52. Legge, D. An introduction to psychological science. London, Methuen, 1975, p. 16.

ingredients of successful librarianship could be broken down, understood and passed on to those less innately gifted.

The second part of the answer concerns the nature of scientific knowledge and has important implications for the eventual creation of a coherent literature of the psychology of librarianship.

It is well known that the subject matter of research must satisfy three criteria if it is to be accepted as scientific. Firstly, the events under study must be Empirical, that is, capable of being observed or measured. Secondly, the events must be Public.

Scientific research has been described as the creation of 'public knowledge'.⁵³ This means that the events must be capable of being observed or measured by others. Thirdly, the events must be Repeatable; that is, capable of replication by other people who follow the same formula as the original demonstration. Unless experimental evidence conforms to these conditions, it is not competent to be used as a foundation for further work. For this reason, it is important that

53. Ziman, J.M. Public knowledge: an essay concerning the social dimension of science. C.U.P., 1968.

even these 'common-sense' phenomena should be validated by the application of sound scientific methodology. The intuitive knowledge of experienced librarians has an important part to play as a stimulus to research, but unless this first level of knowledge is securely bedded in a foundation of universally acceptable scientific technique, it will prove impossible to proceed to the study of increasingly complex levels of library behaviour and so attain the ability to make predictions about such behaviour which will exceed the limitations of common-sense.

A recent suggestion⁵⁴ that the loss of scientific method as practised by the Ionians of the 5th and 6th centuries BC may have retarded the course of scientific development by between fifteen and twenty centuries may be overly pessimistic. However, present day librarians researching into behavioural aspects of information seeking would most certainly benefit substantially by incorporating more rigour into their methods. Information is at a critical watershed $\parallel$? to-day. A range of new technologies stand poised to revolutionize the processes of storing, retrieving and distributing information. The present generation of

54. Sagan, C. Cosmos: a personal voyage. BBC TV, 5.8.81.

information providers must be prepared to walk authoritatively and fairly briskly away from some of the traditional roles which technological progress has already diminished in ways which should not be regretted. They must be prepared to become more concerned with user-orientated aspects of information provision - how it is used, how it is sought, how it is perceived, what effect it has, how it is best presented, and most importantly what really generates valid satisfaction in information users.⁵⁵ Otherwise they will surrender control of their professional destiny - a control which, in sociological terms at least, was questionable in any case under the traditional scheme of things⁵⁶ - and forfeit the chance of a front-line role in the second generation of information workers. These very problems of interaction between information seeker and information provider have been addressed in countless papers in the literature of librarianship and information science. And yet examination of this great volume of published material reveals little sense of direction and little significant progress since Taylor's seminal work back in the

55. McMurdo, G. User satisfaction. *New Library World*, 81 (958) 1980, p. 83-85.

56. Goode, W.J. The librarian: from occupation to profession. *Library Quarterly*, 31 (4) October 1961, p. 306-318.

sixties.⁵⁷ The fact that this vital research area remains stillborn and its literature in a state of stagnation is traceable to a puzzling reluctance to utilize commonly accepted scientific methods. Why this should be so is open to conjecture. Perhaps the problem lies in the educational background of the typical information worker, a background in which the significance of scientific method may have been under-emphasized. There is minimal evidence in the requirements that aspirants must fulfill on the path to professional status as librarians - or even as information scientists - that either of these professions is greatly convinced of the need for any kind of serious adherence to the basic principles that form the common basis of every other scientific discipline.

Perhaps this failing has perpetuated a professional delusion that scientific method would be tediously inappropriate in this particular field and its results trivial. This is to some extent understandable. After all, the aims of the study described in the present document are highly specific, and in terms of the broad scope of librarianship this specificity may be

57. Taylor, R.S. Question negotiation and information seeking in libraries. *College and Research Libraries*, 29 (3) May 1968, p. 178-194.

misconstrued as trivial. Likewise, the results of the study are, per se, of limited significance to general library science and will remain so until they are woven as mere threads into a wider and more complex fabric of related research based on comparably rigorous methods. However, as this fabric builds up and begins to reveal its pattern it will be seen that what may initially have appeared trivial when viewed in isolation was in reality the basic building unit in a sophisticated structure affording new insights into the nature of the interaction between information seeker and information provider. Patience and commitment are prerequisites for those who choose this path.

In conclusion, there is considerable potential for applying the methodology of psychology to the design of studies and investigations in the field of librarianship and information science. Aside from the theoretical benefits accruing from more rigorous methodology, practising library service managers with imagination should be quick to recognise the strategic value of such 'hard' information. With particular regard to the reference process, psychological research offers a better understanding of the factors affecting the success or failure of the interface between librarian and client. However, the nature of psychological

research is not such that 'with a single bound' we shall rid ourselves of the interpersonal constraints upon successful communication with users, and the process of examining the underlying interface will necessarily be gradual and fragmented. Those who genuinely seek to advance the body of scientific knowledge about their profession must heed this caution from Calfee:⁵⁸

In the final analysis, questions and criticisms of any experimental proposal can be endless. You weigh the pros and cons of various decisions, then take your best shots, knowing full well that any single piece of research can provide but a glimpse of a given research space. The gradual accumulation of empirical knowledge seems frustratingly slow in an era when we want "now" answers to questions of broad social and psychological interest. The task of putting together the bits and pieces of research data resembles the assembly of a jigsaw puzzle with pieces missing. For those who prefer simple and final answers to complex questions, scientific research is frustrating and inconclusive. It demands patience and endurance from the type of person who delights in finding the "blue piece with a little chunk of greenery and the barest edge of a red shirt" in a jigsaw puzzle.

58. Calfee, R.C. Human experimental psychology. New York, Holt, Rinehart & Winston, 1975, p. 7.

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5 APPENDIX

ENQUIRIES RECORDED DURING THE EXPERIMENTAL PERIOD,
SHOWING CATEGORY OF ENQUIRY, SEX OF ENQUIRER, AND
TIME OF ENQUIRY.

Monday 6 November 0900 - 1200

BUSY Session

Discounted Time: 1 hour 3 minutes

ENQUIRY	CAT	SEX	TIME
1 Can I buy some University Christmas cards?	(1)	F	0915
2 How do I go about finding something like this? (Article in a periodical)	(2)	F	0935
3 Where are the books with the shelfmark JCM?	(1)	F	0945
4 Can you tell me the address of Longmans?	(3)	F	1005
5 I want to see Mr. Fairweather! (Mr. Freshwater)	(1)	F	1010
6 Have you any idea where the library cafe is?	(1)	M	1015
7 I'd like to buy some Christmas cards?	(1)	F	1022
8 Where is the M.R. Room?	(1)	M	1105
9 I'm finished with this book and there's no-one in ILL.	(1)	F	1130
10 These three books have been ordered by the German Department but are not yet in the catalogue. Why not? Where would I look for a Festschrift?	(2)	F	1140

Monday 6 November 1400 - 1700

NOT BUSY Session

Discounted Time: 1 hour 33 minutes

ENQUIRY	CAT	SEX	TIME
1 How do I get these book reviews then?	(2)	M	1431
2 Where are the lockers?	(1)	F	1433
3 Have you got the parliamentary papers on microfilm?	(2)	M	1437
4 Help with using catalogues.	(2)	F	1445
5 Help required in finding books.	(2)	M	1451
6 Help required in finding books.	(2)	F	1512
7 Help required in finding books.	(2)	M	1516
8 Where are the history books?	(2)	F	1521
9 Help with catalogue.	(2)	M	1537
10 Where are the history books?	(2)	M	1540
11 Do you have Glasgow University records in this library, ie 16th century?	(3)	F	1545
12 Can one borrow books from the Reading Room?	(1)	F	1550
13 Where are the Philosophy books?	(2)	F	1616
14 Enquiry re ILL (for books on, or published in, Hong Kong).	(3)	F	1617
15 Enquiry re weekly list of acquisitions.	(2)	M	1625
16 Help required to find book in catalogue.	(2)	M	1630

Monday 6 November 1400 - 1700

NOT BUSY Session

Discounted Time: 1 hour 33 minutes

	ENQUIRY	CAT	SEX	TIME
17	Where are copies of 'The Student'?	(2)	M	1640
18	What are the opening times of the library?	(1)	M	1655

Tuesday 7 November 0900 - 1200

NOT BUSY Session

Discounted Time: 0 hours 44 minutes

ENQUIRY	CAT	SEX	TIME
1 How would I go about using the subject catalogue? I want to find something on cave painting.	(2)	F	0909
2 How would I go about finding the address of a university in Northern Ireland?	(3)	F	0918
3 What time does Manuscripts open?	(1)	F	0924
4 Where are your microfilm articles from the 'Economist' and the 'Guardian'?	(2)	M	1010
5 Where are the .3's?	(1)	F	1105
6 Do you have 'Hi-fi' and 'Which'?	(2)	M	1120
7 Where will I get this official paper?	(2)	M	1122
8 Do you have any directory of addresses of libraries abroad?	(3)	F	1125
9 General query on Stat. Ref. material.	(2)	M	1130
10 What should I look up in the catalogue for information on the flight of bees?	(2)	M	1140
11 Help in finding books.	(2)	M	1145
12 Where are the exam papers?	(1)	F	1147

Tuesday 7 November 1400 - 1700

BUSY Session

Discounted Time: 0 hours 47 minutes

ENQUIRY	CAT	SEX	TIME
1 Is there a coffee-bar anywhere?	(1)	F	1424
2 I'm looking for unpublished reports from various local authorities. Would you have anything like that?	(3)	M	1428
3 Query re location of journal.	(2)	F	1438
4 Is there a list of autobiographies?	(3)	F	1442
5 Where shall I find Political Studies? (.32)	(2)	F	1449
6 Are the Christmas cards on sale here?	(1)	M	1456
7 What are the rules re consulting manuscripts?	(1)	M	1500
8 Help in using catalogue.	(2)	F	1503
9 Where is *V window?	(1)	M	1521
10 Could I have some more of these microfilms?	(2)	M	1527
11 Where are Psychology books?	(2)	M	1547
12 Reader wants to find title of article in American journal circa 1959-60. Referred to Miss Guild.	(3)	M	1551
13 Reader trying to find journal on Farm Economics, but unsure of exact title. Asked to verify title.	(3)	F	1630
14 Help required to find bibliography.	(3)	M	1452

Wednesday 8 November 0900 - 1200

BUSY Session

Discounted Time: 1 hour 23 minutes

ENQUIRY	CAT	SEX	TIME
1 Where are back numbers of the 'British Humanities Index'? Where will I find the 'Political Quarterly'?	(2)	F	1004
2 Where will I get Per .5 Roy?	(1)	M	1007
3 Can you help me use the 'Times Index'? (Led to K.C.A. also, and microfilm room.)	(2)	F	1018
4 Request for microfilms.	(2)	F	1151

Wednesday 8 November 1400 - 1700

NOT BUSY Session

Discounted Time: 1 hour 36 minutes

ENQUIRY	CAT	SEX	TIME
1 Student from Dundee University wanted to look at collection of engineering and physics books in the library. Sent to 4th floor but suggested he went to K.B.	(2)	M	1435
2 Can I buy some cards?	(1)	M	1440
3 Enquiry about exhibition of Canadian books.	(1)	M	1445
4 Enquiry re journal 'TESOL' (acronym). We do not have it.	(2)	M	1455
5 Same enquirer as (1) wanted to look at current periodicals.	(1)	M	1505
6 Enquiry re sale of Christmas cards.	(1)	F	1510
7 Reader wanted to consult index to the 'Times' and then 1971 numbers on microfilm.	(2)	F	1515
8 Help in using catalogue.	(2)	F	1543
9 I'd like to buy some Christmas cards.	(1)	F	1553
10 I'd like to buy some Christmas cards.	(1)	F	1600
11 Where is Accounting?	(2)	M	1605
12 Location of telephones.	(1)	M	1606
13 Where can I buy the Christmas cards?	(1)	F	1611

Wednesday 8 November 1400 - 1700

NOT BUSY Session

Discounted Time: 1 hour 36 minutes

ENQUIRY	CAT	SEX	TIME
14 Help with shelfmark.	(1)	M	1617
15 Where can I find a book on surnames, their origin and meaning?	(3)	M	1621
16 Help in finding book in catalogue.	(2)	F	1624
17 Enquiry re theses on linguistics.	(3)	M	1629
18 Request for library guides.	(1)	F	1640
19 Where is the Kirkpatrick Library? Use of catalogue explained.	(1)	F	1645
20 Where is Per .1?	(1)	F	1649

Thursday 9 November 0900 - 1200

NOT BUSY Session

Discounted Time: 0 hours 52 minutes

ENQUIRY	CAT	SEX	TIME
1 Do you have anything on the history of medicine?	(2)	F	0906
2 Request for Canadian Exhibition Catalogue.	(1)	F	0950
3 Request for Canadian Exhibition Catalogue. Who was here yesterday?	(1)	F	0955
4 Request for several library guides. Where can I get a Current Serials list?	(1)	M	0956
5 There are no .15 and .13 on the 4th floor (taken up and shown).	(1)	M	0959
6 Where are the architecture books?	(2)	F	1005
7 How do I get a carrel?	(1)	F	1032
8 Where is Morningside Park?	(1)	M	1104
9 Where will I find the Business Studies Library and the Economics Library?	(1)	M	1115
10 Would you have the Welsh words of the Welsh National Anthem?	(3)	M	1117
11 Who can help me in the Ancient Manuscripts Department? There's nobody there.	(1)	F	1129

Thursday 9 November 1400 - 1700

BUSY Session

Discounted Time: 1 hour 12 minutes

ENQUIRY	CAT	SEX	TIME
1 Help with using catalogue.	(2)	F	1425
2 Reader wants access to Microtext Room.	(1)	F	1430
3 Enquiry re two Art journals. Is there a world list of Art journals? (Apparently not.)	(3)	M	1445
4 French student requires help in finding encyclopaedias.	(2)	F	1510
5 Enquiry from 1st year student re carrels.	(1)	M	1529
6 Location of periodical.	(2)	F	1534
7 Are the Christmas cards for sale here?	(1)	F	1538
8 Where is the Education Research Unit Library?	(1)	M	1545
9 Where are books on South-east Asian History?	(2)	M	1600
10 Help required to find books at .5. Lending system explained.	(1)	M	1610
11 Where is 'Punch'?	(2)	M	1637
12 Enquiry re method of obtaining 6th floor books.	(1)	M	1655

Friday 10 November 0900 - 1200

BUSY Session

Discounted Time: 0 hours 31 minutes

ENQUIRY	CAT	SEX	TIME
1 Where are the Social Science journals?	(2)	M	0909
2 I'm looking for the 'Observer Supplement' and the 'Spectator'.	(2)	M	0927
3 Where is the 'English History Review'?	(2)	M	0949
4 Where is C.A.S.?	(1)	M	0954
5 Where are Periodicals .9?	(1)	F	1000
6 Does the library subscribe to a journal called 'Indian Linguistics'?	(2)	M	1010
7 Do we keep 'Guardians' over here?	(2)	M	1112
8 Do you have 'Akros'?	(2)	F	1114
9 Can I get a photocopy of an article in a journal in the Psychology Library?	(1)	F	1150
10 Have you a guide giving the exact opening hours of the library?	(1)	M	1158

Friday 10 November 1400 - 1700

NOT BUSY Session

Discounted Time: 1 hour 25 minutes

ENQUIRY	CAT	SEX	TIME
1 Where is the 'Journal of Political Economy'?	(2)	M	1414
2 I'd like to buy some postcards.	(1)	F	1430
3 Where is .1, and back numbers of journals?	(1)	F	1432
4 Where is .1?	(1)	F	1434
5 How do I obtain an Edinburgh thesis?	(2)	M	1447
6 Where is the English Library?	(1)	F	1455
7 How do I get books from the 6th floor?	(1)	M	1456
8 Where is the French Library?	(1)	F	1500
9 Where is the English Library?	(1)	M	1505
10 Where are abstracts kept? (Enquiry not clear - referred to Miss Guild who showed him Edinburgh University list of abstracting journals.)	(2)	M	1515
11 Where can I buy the Christmas cards?	(1)	F	1521
12 Where is Per .6?	(1)	M	1530
13 Reader wants to trace article in 'Scientific American'.	(3)	F	1555
14 Help required to find a book.	(2)	F	1600
15 What have you in the way of Polish Literature?	(2)	F	1605

Friday 10 November 1400 - 1700

NOT BUSY Session

Discounted Time: 1 hour 25 minutes

	ENQUIRY	CAT	SEX	TIME
16	Enquiry re locker accommodation (First year student).	(1)	F	1642
17	Enquiry re use of Psychology Library (Post-graduate student).	(1)	M	1645
18	Reader wants information about Grangemouth - history, develop- ment, etc. Referred to Miss Guild.	(3)	M	1650
19	When is Charities Week? (Ask at Student Centre.)	(3)	M	1655

Monday 13 November 0900 - 1200

NOT BUSY Session

Discounted Time: 0 hours 57 minutes

ENQUIRY	CAT	SEX	TIME
1 Where will I find this? It's in Stat. Ref.	(1)	F	0950
2 Why are there only two shelves on the History of Art?	(2)	M	0950
3 Is there a Science Reading Room? How are the books arranged?	(1)	M	1018
4 I need some information on earthquake faulting.	(3)	M	1030
5 I can't find the Camden Society under RK. Where is it?	(2)	F	1035
6 Can you tell me where the Haldane Library is?	(1)	M	1100
7 Where are the Christmas cards sold?	(1)	M	1112
8 I lost some money here. Is there any chance of getting it back?	(1)	M	1125
9 I can't find the Chicago Linguistic Papers in your catalogue and I know you have them! (Found, at end of Chicago scheme, after 'University'.)	(2)	M	1128
10 Help with catalogue.	(2)	M	1135
11 Purchase of Christmas cards.	(1)	F	1140
12 Has anyone handed in a £5.00 note?	(1)	M	1147
13 Where would I find the proceedings of the British Society?	(2)	F	1154

Monday 13 November 0900 - 1200

NOT BUSY Session

Discounted Time: 0 hours 57 minutes

ENQUIRY

CAT SEX TIME

14 I can't find this under the
shelfmark it gives in the cata-
logue. May I see one of the
catalogues?

(2) F 1159

Monday 13 November 1400 - 1700

BUSY Session

Discounted Time: 0 hours 38 minutes

ENQUIRY	CAT	SEX	TIME
1 Help required to find journal in catalogue.	(2)	M	1405
2 Query re location of History book.	(2)	F	1445
3 Can I buy some Christmas cards?	(1)	M	1450
4 Can I get a book from the Forestry Library? There is no copy in the Main Library.	(1)	M	1452
5 How do I find these two journals?	(2)	F	1500
6 Purchase of Christmas cards.	(1)	F	1508
7 Where are there maps of Sierra Leone?	(3)	F	1511
8 Purchase of Christmas cards.	(1)	M	1516
9 Query re change of address.	(1)	F	1518
10 Help in finding book in catalogue.	(2)	M	1530
11 Do you take the 'New York Times'?	(2)	M	1540
12 Enquiry re stamping of matriculation card.	(1)	F	1555
13 Do you have a complete set of the 'Economist'?	(2)	M	1558
14 Do you have the 'Journal of Industrial Relations'?	(2)	M	1605
15 Where are these shelfmarks (.3)?	(1)	M	1610
16 Query re Canadian Exhibition.	(1)	F	1619

Monday 13 November 1400 - 1700

BUSY Session

Discounted Time: 0 hours 38 minutes

	ENQUIRY	CAT	SEX	TIME
17	Query re location of Psychology journal.	(2)	M	1638
18	Help with catalogue.	(2)	F	1645

Tuesday 14 November 0900 - 1200

BUSY Session

Discounted Time: 0 hours 31 minutes

ENQUIRY	CAT	SEX	TIME
1 Where is the reference section?	(1)	F	0914
2 I'd like to see the different syllabi for Modern Languages.	(2)	F	0920
3 Where is the Grants Register?	(2)	M	0930
4 I can't find the 1978 issues of this periodical up on the 6th floor. Where are they?	(2)	F	1028
5 Request to close a volume of the author catalogue which had come loose.	(1)	F	1030
6 I'm from the University of Surrey and would like to look at your section on Russian History.	(2)	F	1032
7 Where is the Reserve Room?	(1)	F	1120
8 I'd like some Christmas cards. Where are they sold?	(1)	M	1134
9 Have you got a prospectus for Heriot-Watt University?	(2)	F	1138
10 Purchase of Christmas cards.	(1)	M	1143
11 What time does the library close tonight?	(1)	M	1200

Tuesday 14 November 1400 - 1700

NOT BUSY Session

Discounted Time: 1 hour 39 minutes

ENQUIRY	CAT	SEX	TIME
1 Where can I buy library postcards?	(1)	F	1420
2 Assistance at catalogue.	(2)	F	1430
3 Where is Ref .4? Is this different from Main Ref?	(1)	M	1440
4 Is there a Persian dictionary in the library? Do you have 'Who's Who'?	(2)	F	1442
5 Where is .3?	(1)	F	1502
6 Where can I find the 'Listener'?	(2)	M	1505
7 Enquiry re T.E.S.O.L. (Vol 11 required but we have it only from Vol 12.)	(2)	M	1517
8 Where is .1?	(1)	M	1522
9 Purchase of Christmas cards?	(1)	M	1532
10 How do I find an MPhil dissertation I'm looking for?	(2)	F	1548
11 Have you a 'Who's Who in Zoology'? (No, but 'Who's Who of British Scientists' will do.)	(2)	M	1550
12 I'd like to buy some postcards.	(1)	M	1554

Wednesday 15 November 0900 - 1200

NOT BUSY Session

Discounted Time: 1 hour 7 minutes

ENQUIRY	CAT	SEX	TIME
1 Where's .8?	(1)	M	0932
2 Where is Vq?	(1)	F	0950
3 Can you get down to the coffee room without going out there?	(1)	F	1007
4 What floor is .27?	(1)	M	1013
5 Request for assistance at catalogue.	(2)	F	1018
6 Have you anything giving the main events year by year between the years 1748-1844? ('Times Index', and chronologues in Main Ref .903.)	(3)	M	1025
7 Do you have the Oxford and Cambridge entrance exam papers?	(2)	F	1038
8 Request for Canadian Exhibition Catalogue.	(1)	F	1130
9 Have you got a 2p piece for two pennies?	(1)	F	1139
10 Can I buy some of the cards?	(1)	F	1143
11 Where would I find reviews on this book about Chomsky, published in 1970?	(3)	F	1144
12 Where is the theses section I?	(1)	F	1150
13 Purchase of Christmas cards.	(1)	F	1155

Wednesday 15 November 1400 - 1700

BUSY Session

Discounted Time: 1 hour 5 minutes

ENQUIRY	CAT	SEX	TIME
1 Can you tell me where to find information on Anglo-American relations at the time of the American War of Independence?	(3)	M	1425
2 Enquiry re location of two journals.	(2)	F	1430
3 Request for piece of paper to write suggestions for Suggestion Box. (That we should take the 'Times' daily for general use.) Same reader enquired about allocation of carrels.	(1)	M	1434
4 Where is F.Q.? (Turns out to be Ref. Hist. Q. on 3rd floor.)	(1)	M	1437
5 Is there a telephone in the library?	(1)	M	1445
6 Reader wants book on introduction to Economics (.33).	(2)	M	1510
7 Where do I buy these Christmas cards?	(1)	M	1540
8 How do I get to the basement? (Meaning coffee room.)	(1)	M	1600
9 Where are back numbers of the 'New York Times'?	(2)	M	1602
10 I'd like to buy some Christmas cards.	(1)	F	1639
11 Query re location of a law journal	(2)	F	1658

Thursday 16 November 0900 - 1200

BUSY Session

Discounted Time: 0 hours 52 minutes

ENQUIRY	CAT	SEX	TIME
1 Are there any typewriters?	(1)	F	0906
2 When do you close tonight?	(1)	M	0920
3 If I request this through the School of Agriculture I can get a xerox copy free by ILL, but if I get a xerox copy here I have to pay for it. May I have it free?	(1)	M	0936
4 I have an appointment with the librarian.	(1)	M	1002
5 Where's Per .15?	(1)	M	1006
6 Where's the French Department?	(1)	F	1009
7 Is there somewhere I can use a cassette?	(1)	F	1020
8 Where is Experimental Psychology?	(2)	F	1025
9 Can my friend come and see the library?	(1)	M	1027
10 Are there gents' loos on the 3rd floor?	(1)	M	1030
11 Request to see someone in a study-room.	(1)	M	1120
12 Where will I find .5199?	(1)	M	1140
13 Where is the xerox machine?	(1)	M	1155

Thursday 16 November 1400 - 1700

NOT BUSY Session

Discounted Time: 1 hour 18 minutes

ENQUIRY	CAT	SEX	TIME
1 Help in finding books in catalogue	(2)	M	1420
2 Do you have the 'New York Review of Books'?	(2)	M	1428
3 Same reader as (1) enquiring how to borrow books.	(1)	M	1430
4 Reader is looking for books on North American Indians.	(3)	M	1445
5 I'd like to buy three dozen post-cards.	(1)	M	1448
6 Where is .1?	(1)	F	1452
7 Where are the books on Accounting?	(2)	F	1453
8 Reader wants shelfmark explained. Cannot find book.	(2)	F	1455
9 Help with catalogue.	(2)	F	1512
10 Help required to find journals.	(2)	M	1520
11 Help required to find journals.	(2)	M	1530
12 Can I buy some Christmas cards?	(1)	M	1545
13 Enquiry about borrowing a thesis.	(1)	F	1548
14 Request for 'Commonwealth Universities Yearbook'.	(2)	M	1610
15 Reader wants to consult calendars of other British Universities.	(2)	M	1613
16 Enquiry re location of periodical shelfmark.	(1)	F	1636

Thursday 16 November 1400 - 1700 NOT BUSY Session

Discounted Time: 1 hour 18 minutes

ENQUIRY

CAT SEX TIME

17 Where are these two psychology
journals?

(2) F 1642

Friday 17 November 0900 - 1200

NOT BUSY Session

Discounted Time: 1 hour 9 minutes

ENQUIRY	CAT	SEX	TIME
1 What do you have on Religion between two given dates? I'm trying to compile a bibliography.	(3)	F	0914
2 Do you need a special borrower's card for the Scottish Studies Library? Can I use New College Library?	(1)	M	0940
3 Where would I find books with the shelfmark F.3 and .5 and .1?	(1)	M	1021
4 Where would I find Advertising?	(2)	M	1022
5 Do you have the journal 'Language and Speech'?	(2)	M	1025
6 Are the Christmas cards for sale here?	(1)	M	1027
7 Can I buy some of the postcards?	(1)	F	1030
8 Enquiry about indexes to newspapers.	(2)	F	1115
9 I'm looking for book reviews. Can you help me?	(2)	M	1125
10 Request for Main Library guide.	(1)	M	1140
11 Help required at catalogue.	(2)	M	1145
12 Request for admission and permission to use the Psychology Library.	(1)	M	1152

Friday 17 November 1400 - 1700

BUSY Session

Discounted Time: 0 hours 44 minutes

ENQUIRY	CAT	SEX	TIME
1 Where are books on Industrial Psychology? (.331015)	(2)	M	1442
2 Request to use stapler.	(1)	M	1522
3 May I buy some Christmas cards?	(1)	M	1530
4 Help required to find archaeology book in catalogue.	(2)	M	1550
5 Where is .7?	(1)	F	1555
6 Request for help at catalogue.	(2)	F	1612
7 I'd like to buy some Christmas cards.	(1)	F	1643